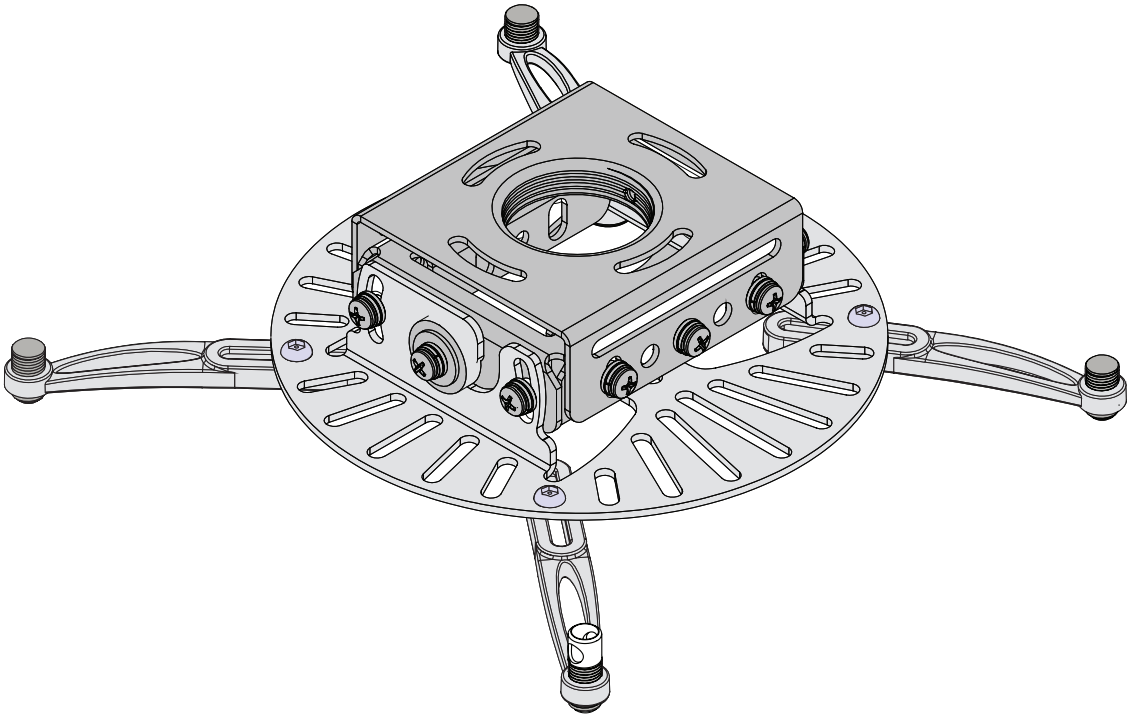
PREMIER MOUNTS®

CREATING POSITIVE CUSTOMER EXPERIENCES

# INSTALLATION INSTRUCTIONS



## PDS-PLUS
## Versatile Projector Mount

Model: PDS-PLUS/PDS-PLUS-W


**NORTH AMERICA**

3130 East Miraloma Avenue
Anaheim, CA 92806 USA
USA and Canada
Phone: 1.800.368.9700
Fax: 1.800.832.4888
Other Locations
Phone: (001).714.632.7100
Fax: (001).714.632.1044

**EUROPE**

Swallow House,
Shilton Industrial Estate,
Shilton, Coventry, England CV79JY
Phone: +44 (0) 2476 614700
Fax: +44 (0) 2476 614710


9530-009-011-0G

## Contents

Weight Limit. ..... 2
Warning Statements. ..... 2
Installation Tools. ..... 3
Parts List. ..... 3
Features. ..... 4
Introduction. ..... 5
Optional Mounting Configurations. ..... 5
Installing the PDS-PLUS/PDS-PLUS-W. ..... 6
Ceiling Installation - Pipe. ..... 6
Ceiling Installation - Wood Stud. ..... 6
Ceiling Installation - Solid Surface. ..... 8
Attaching the PDS-PLUS/PDS-PLUS-W to the Projector. ..... 8
Attaching the Projector Plate. ..... 9
Selecting the Mounting Hardware. ..... 9
Multiple Mounting Point Installation. ..... 9
Single Mounting Point Installation. ..... 12
Attaching the PDS-PLUS/PDS-PLUS-W Base. ..... 13
Base Box Adjustment. ..... 14
Securing the PDS-PLUS/PDS-PLUS-W Projector Mount. ..... 14
Technical Specifications. ..... 15
Warranty. ..... 16
Disclaimer. ..... 16

## Weight Limit

Maximum Projector Weight: 75 lbs.

THE CEILING STRUCTURE MUST BE CAPABLE OF SUPPORTING AT LEAST FIVE TIMES THE WEIGHT OF THE PROJECTOR. IF NOT, THE CEILING STRUCTURE MUST BE REINFORCED.

## Warning Statements

PRIOR TO THE INSTALLATION OF THIS PRODUCT, THE INSTALLATION INSTRUCTIONS MUST BE READ AND COMPLETELY UNDERSTOOD. KEEP THESE INSTALLATION INSTRUCTIONS IN AN EASILY ACCESSIBLE LOCATION FOR FUTURE REFERENCE.

PROPER INSTALLATION PROCEDURE BY A QUALIFIED SERVICE TECHNICIAN MUST BE FOLLOWED, AS OUTLINED IN THESE INSTALLATION INSTRUCTIONS. FAILURE TO DO SO COULD RESULT IN PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR EVEN DEATH.

SAFETY MEASURES MUST BE PRACTICED AT ALL TIMES DURING THE ASSEMBLY OF THIS PRODUCT. USE PROPER SAFETY EQUIPMENT AND TOOLS FOR THE ASSEMBLY PROCEDURE TO PREVENT PERSONAL INJURY.

PREMIER MOUNTS DOES NOT WARRANT AGAINST DAMAGE CAUSED BY THE USE OF ANY PREMIER MOUNTS PRODUCT FOR PURPOSES OTHER THAN THOSE FOR WHICH IT WAS DESIGNED OR DAMAGE CAUSED BY UNAUTHORIZED ATTACHMENTS OR MODIFICATIONS, AND IS NOT RESPONSIBLE FOR ANY DAMAGES, CLAIMS, DEMANDS, SUITS, ACTIONS OR CAUSES OF ACTION OF WHATEVER KIND RESULTING FROM, ARISING OUT OF OR IN ANY MANNER RELATING TO ANY SUCH USE, ATTACHMENTS OR MODIFICATIONS.

At least two qualified people should perform the assembly procedure. Personal injury and/or property damage can result from dropping or mishandling the projector.

If mounting to wall studs or ceiling studs, make sure that the mounting screws are anchored into the center of the wall studs or ceiling studs. Use of an edge-to-edge stud finder is recommended.

Be aware of the mounting environment. If drilling and/or cutting into the mounting surface, always make sure that there are no electrical wires in wall. Cutting or drilling into an electrical line may cause serious personal injury.

Make sure there are no water or natural gas lines inside the wall where the mount is to be located. Cutting or drilling into a water or gas line may cause severe property damage or personal injury.

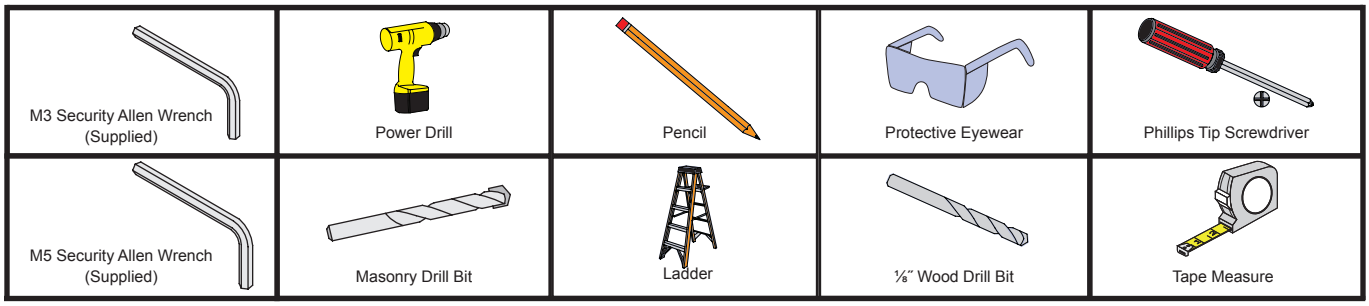
This product is intended for indoor use only. Use of this product outdoors could lead to product failure and/or serious personal injury.

Do not install near sources of high heat. Do not install on a structure that is prone to vibration, movement or chance of impact.

Contact Premier Mounts with any questions:
(800) 368-9700
techsupport@mounts.com

## Installation Tools

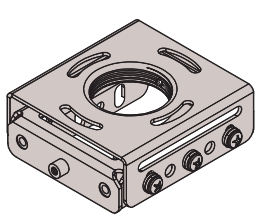
The following tools may be required depending upon your particular installation. They are not included.

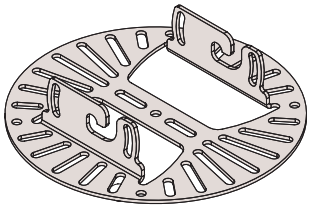


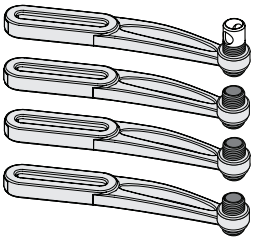

## Parts List

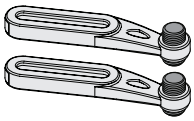
Make sure your Premier Mounts product has the following hardware and components before beginning installation. If there are parts missing and/or damaged, stop the installation and call Premier Mounts at (800) 368-9700.

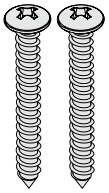
### PDS-PLUS/PDS-PLUS-W Mount Hardware

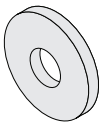

Base Box (Qty 1)

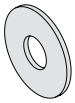

Projector Bracket (Qty 1)

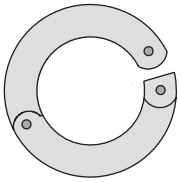

Mounting Leg - Long (Qty 4)

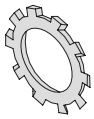

Mounting Leg - Short (Qty 2)


#14 x 2″ Wood Screw (Qty 2)


Nylon Spacer (Qty 2)


¼″ Flat Washer (Qty 2)

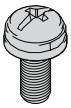

Escutcheon Ring (Qty 1)

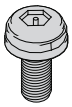

External Tooth Washer (Qty 4)

Phillips Head (Qty 1)

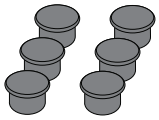
Security Head (Qty 1)

M6 x 8mm Set Screw


Phillips Head (Qty 6)


Security Head (Qty 12)

M6 x 12mm Screw w/Integrated Washer


Barrel Cap (Qty 6)

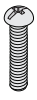
### Standard Hardware

M3 Flat Washer (Qty 10)

¼-20 x 5/16″ Screw (Qty 1)

M2.5 x 10mm Screw (Qty 4)

M2.5 x 12mm Screw (Qty 4)


M3 x 16mm Screw (Qty 4)

M4 x 12mm Screw (Qty 4)

M5 x 12mm Screw (Qty 4)

M6 x 12mm Screw (Qty 4)

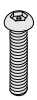
### Lock-It™ Security Hardware

M3 Flat Washer (Qty 10)

¼-20 x 5/16″ Screw (Qty 1)

M2.5 x 10mm Screw (Qty 4)

M2.5 x 12mm Screw (Qty.4)


M3 x 16mm Screw (Qty 4)

M4 x 12mm Screw (Qty 4)

M5 x 12mm Screw (Qty 4)

M6 x 12mm Screw (Qty 8)

## Features

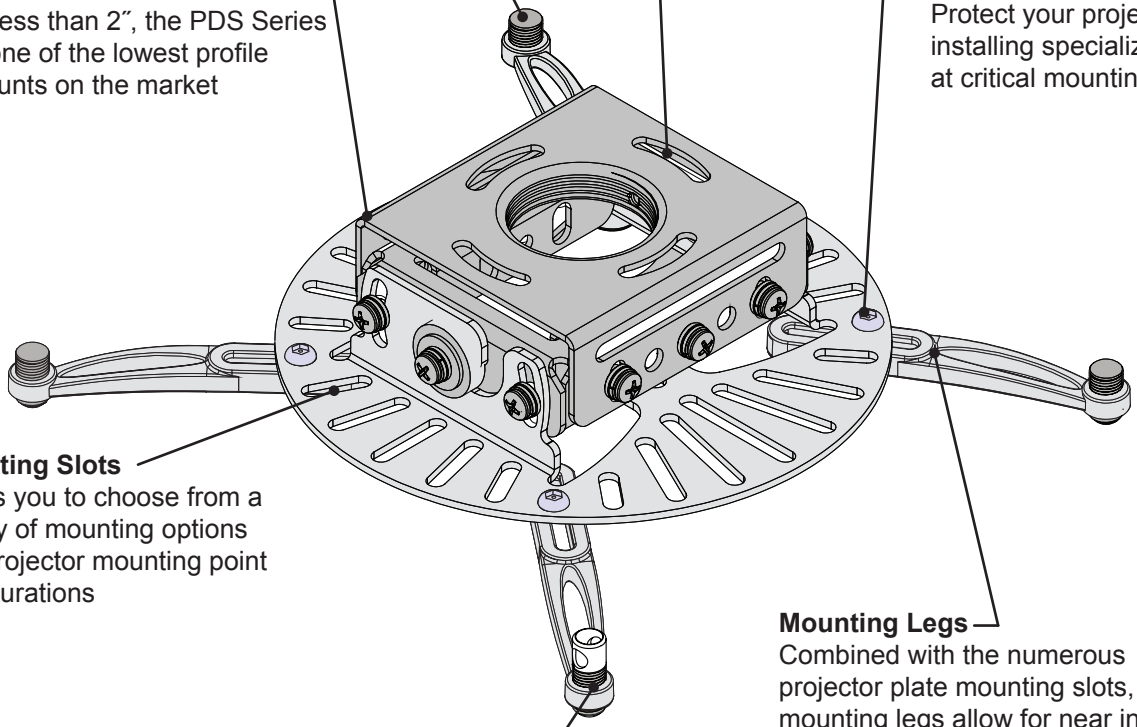
Congratulations on the purchase of your new Premier Mounts PDS-PLUS/PDS-PLUS-W Versatile Projector Mount. The PDS-PLUS works together with our exciting new PDS Base Box. The PDS-PLUS/PDS-PLUS-W has multiple mounting configurations to fit a variety of projectors. The PDS-PLUS/PDS-PLUS-W is truly the most VERSATILE projector mount on the market today.

**Direct Mounting Slots**
Enable mount to be fastened directly to structural surface

**Adjustable Leveling Barrels**
You can quickly level the mounting legs without any specialized tools

**Low Profile**
At less than 2″, the PDS Series is one of the lowest profile mounts on the market

**Lock-It™ Security Hardware**
Protect your projector by installing specialized hardware at critical mounting points



**Mounting Slots**
Allows you to choose from a variety of mounting options and projector mounting point configurations

**Mounting Legs**
Combined with the numerous projector plate mounting slots, the mounting legs allow for near infinite mount configurations

**Security Leveling Barrel**
Allows the user to easily secure the mount with a padlock or a steel-cable locking system (PCB-CSL1). The locks (sold separately) would make it nearly impossible for anyone to remove the projector from the mount.

## Introduction

Your PDS-PLUS/PDS-PLUS-W mount may be secured to either a single ceiling stud or a solid surface ceiling, such as concrete.

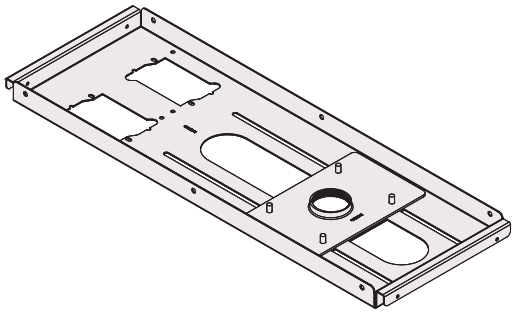
Please read these installation instructions once thoroughly before attempting to install your Premier Mounts product.

Please take a minute to familiarize yourself with the contents of the package and make sure you have all the parts and tools you need to safely complete the installation.

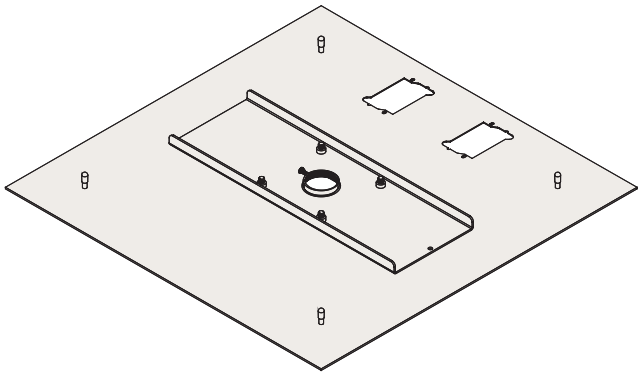
In addition, some steps of this installation may require two people to prevent personal injury and/or damage to your projector. Please observe all warnings in the following installation procedure and utilize proper safety equipment at all times.

## Optional Mounting Configurations

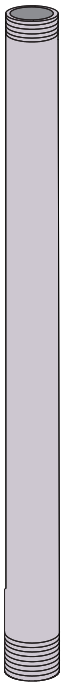
This section contains different configurations, if applicable, that the PDS-PLUS/PDS-PLUS-W can be used with. The CLS adapter will be used in conjunction with the PP-FCTA and PP-FCMA. Please refer to the installation instructions that come packaged with the following products.



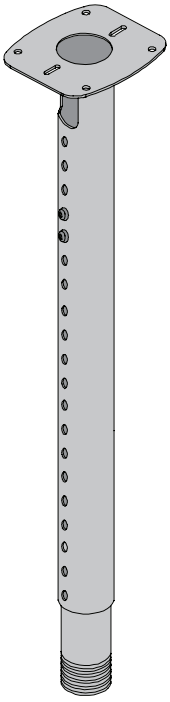
PP-FCTA



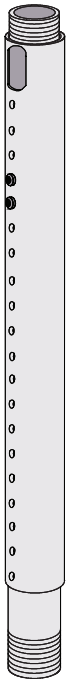
PP-FCMA



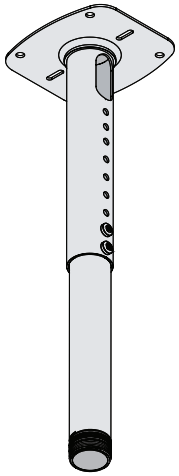
Standard 1-½″ NPT



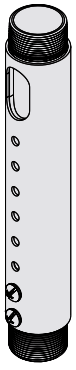
AST-2446



APP-2446



AST-1321



APP-1321

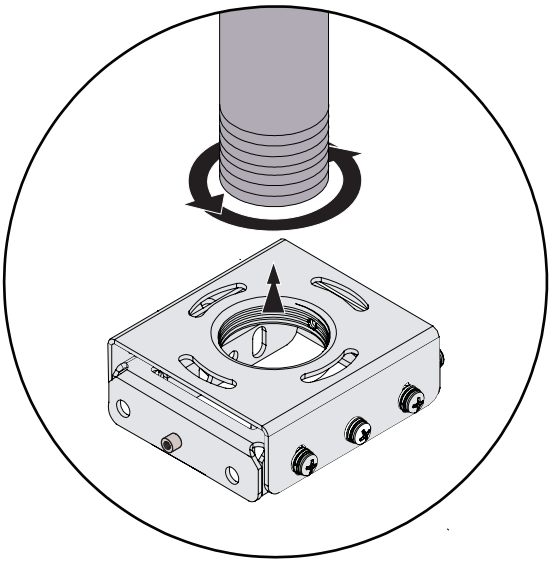
# Installing the PDS-PLUS/PDS-PLUS-W

Unpack the PDS-PLUS/PDS-PLUS-W Mount and familiarize yourself with the components. Please take time before you install the PDS-PLUS/PDS-PLUS-W to determine the location of where the PDS-PLUS/PDS-PLUS-W will be mounted.

## Ceiling Installation - Pipe

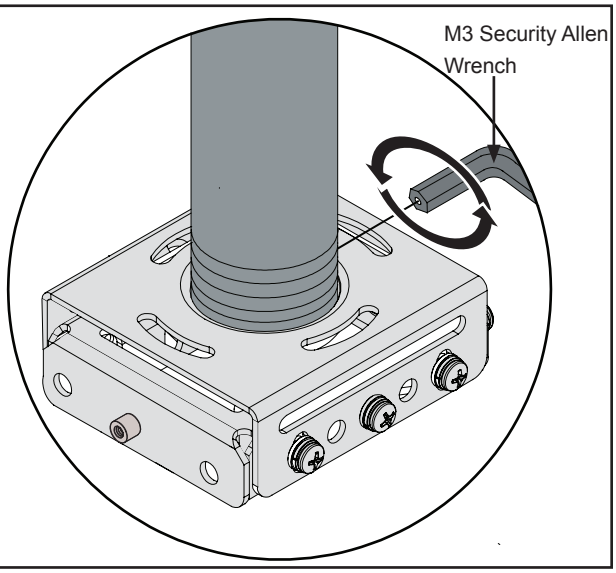
### Step 1

1. After the pipe has been properly secured to the ceiling structure, thread the base box to the lower portion of the pipe.



### Step 2

1. Secure the base box to the pipe with the M6 x 8mm set screw and tighten it down using the M3 Security Allen wrench (supplied).




Proceed to the **"Ceiling Installation - Wood Stud"** section.

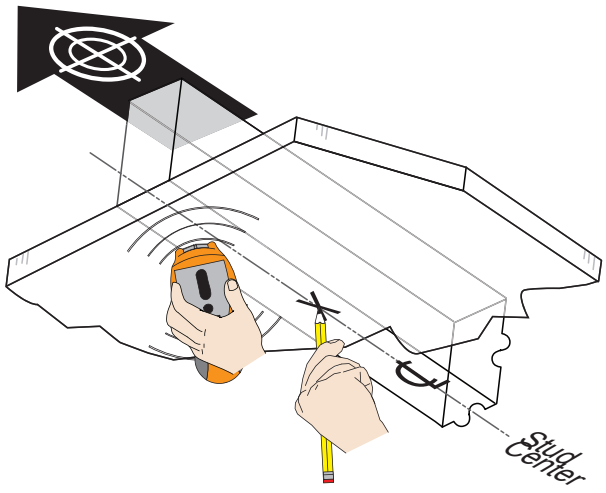
## Ceiling Installation - Wood Stud

### Step 1

1. Use a stud finder to locate a ceiling stud closest to your desired installation location.
2. Identify the center of the ceiling stud.
3. Use a pencil to mark the location of the ceiling stud center.

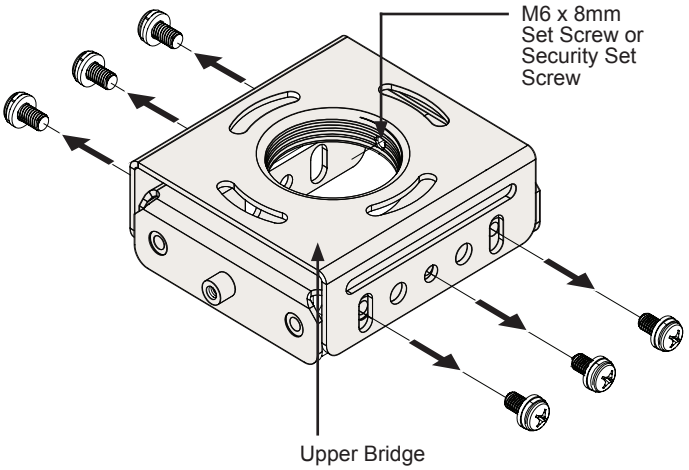
The PDS-PLUS/PDS-PLUS-W may be attached to 1-1/2" standard threaded pipe (NPT), to one of Premier Mount's optional ceiling adapters, or to a single wood stud. If using an optional adapter, please refer to the installation instructions that come with adapters.

To prevent the stud from splintering, use a 1/8" wood drill bit to drill pilot holes.



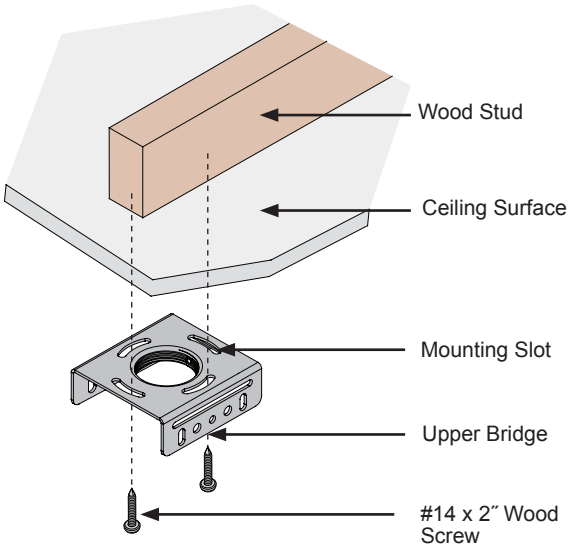
## Step 1

1. Separate the Upper Bridge from the Base Box by removing the six (6) M6 x 12mm Phillips head screws (three on each side).




## Step 2

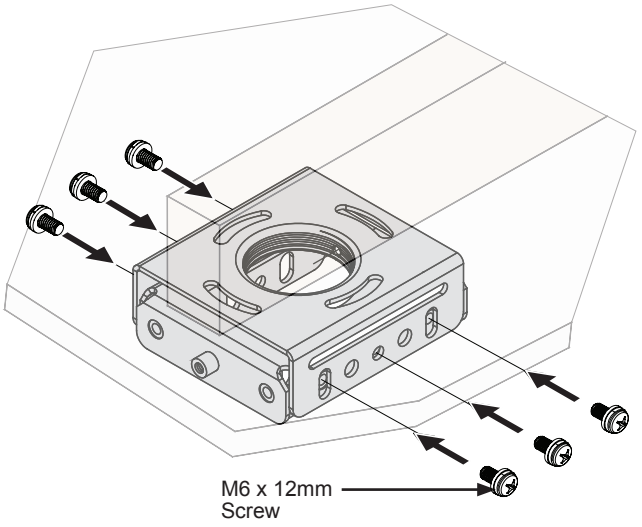
1. Use the appropriate slot openings for single wood stud mounting, depending on your ceiling configuration. The adjustable channel slots on the upper bridge plate will allow you to fine tune the final orientation of the projector.
2. Secure the Upper Bridge to the center of the stud on the ceiling structure at this time using two (2) #14 x 2" wood screws (supplied).




## Step 3

1. Attach the base box to the upper bridge and secure with the six (6) M6 x 12mm Phillips Head screws (above).

⚠ DO NOT OVERTIGHTEN THESE SCREWS AT THIS TIME.



## Ceiling Installation - Solid Surface

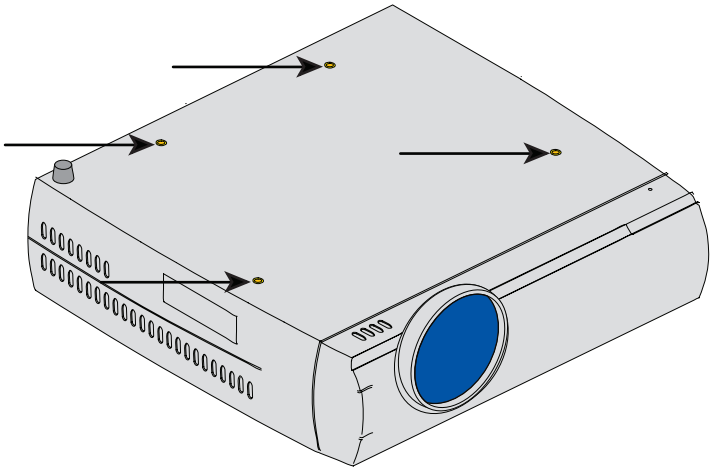
The PDS-PLUS/PDS-PLUS-W can be mounted to a ceiling with a minimum 6" thickness. Concrete wedge anchors must be used for concrete installation. It is recommended that ¼" wedge anchors be used. A concrete bit must be used to drill the pilot hole. The concrete wedge anchors and concrete drill bit are commercially available.

1. Begin by placing the upper bridge into position against the ceiling, keeping it level.
2. Mark off four holes to be used for securing the mount and place the upper bridge aside.
3. Next, drill holes using the appropriate concrete bit for your anchor.
4. Insert a concrete anchor into each hole.
5. If necessary, a hammer can be used to lightly tap each anchor into place so that they are flush with the ceiling.
6. Remove the nuts and flat washers from the concrete wedge anchors.
7. Once all of the anchors are in place, move the upper bridge back into position.
8. Attach the nut onto the threaded shaft that is protruding from the ceiling.
9. Do not tighten until all nuts and flat washers are in place.

Proceed to the **"Attaching the PDS-PLUS/PDS-PLUS-W to the Projector"** section.

## Attaching the PDS-PLUS/PDS-PLUS-W to the Projector

To truly show the versatility of the PDS-PLUS/PDS-PLUS-W, the following pictures will show a variety of configurations that can be achieved with the PDS-PLUS/PDS-PLUS-W. Your individual application will depend on the purchased projector.



1. Locate the mounting points on the bottom of the projector (see arrows above for sample mounting points).

Proceed to the **"Attaching the Projector Plate"** section.

# Attaching the Projector Plate

## Selecting the Mounting Hardware

1. Insert a small straw or toothpick into the threaded inserts found on the bottom or top of the projector.
2. Use a pencil to mark the depth of the threaded insert on the small straw or toothpick.
3. Mark the straw or toothpick 1/8” above the depth of the threaded insert, as shown in Figure 1.
4. Insert the small straw or toothpick into the remaining threaded inserts to compare and verify their depth using the straw or toothpick’s 1/8” allowance mark.
5. Locate the correct diameter screw for the threaded insert.

If the screw you selected is longer than the 1/8” allowance mark on the small straw or toothpick, as shown in Figure 2 and Figure 3, do not use this screw. The screw length must not bypass the mark.

6. Test each size of the screws provided. The correct screws should thread easily into the mounting point and not pull out when tension is applied.

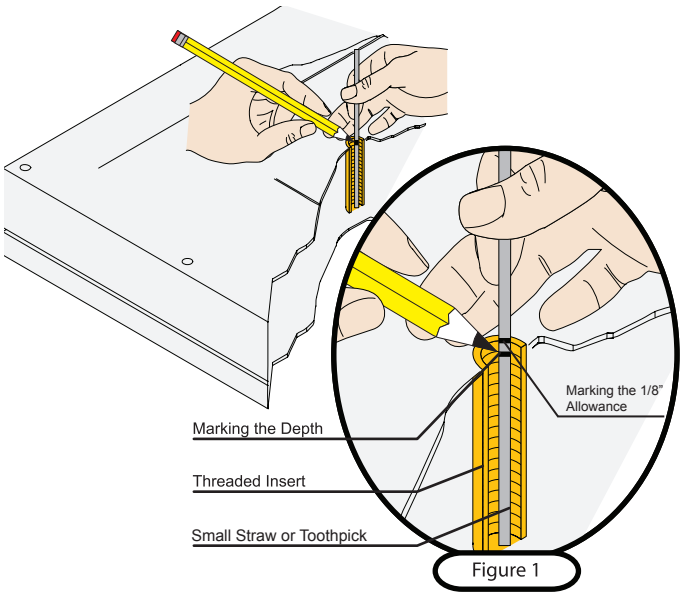


Figure 1

Does your projector have multiple mounting points or a single mounting point?

The PDS-PLUS/PDS-PLUS-W comes with the option of using Lock-It™ Security Screws. To use the security screws, simply replace the M6 x 12mm Phillips Pan head screws with the M6 x 12mm security screws. Once the hardware has been changed, adjust the PDS-PLUS/PDS-PLUS-W and tighten down the M6 x 12mm security screws using the M5 Security Allen wrench (supplied).

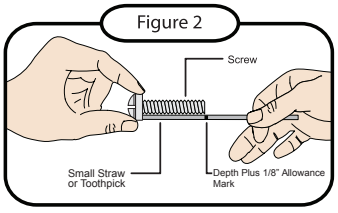


Figure 2

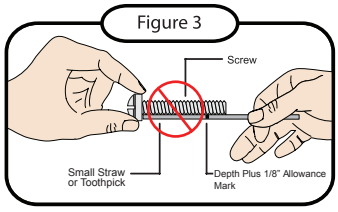
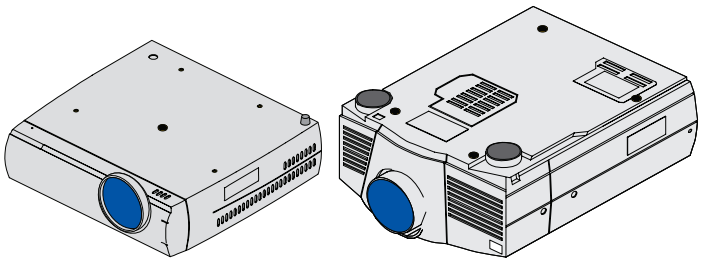


Figure 3

If your projector has multiple mounting points, proceed to the **“Multiple Mounting Point Installation”** section.

If your projector has a single mount point, remove the pre-installed mounting legs on the universal projector plate and skip to the **“Single Mount Point Installation”** section.



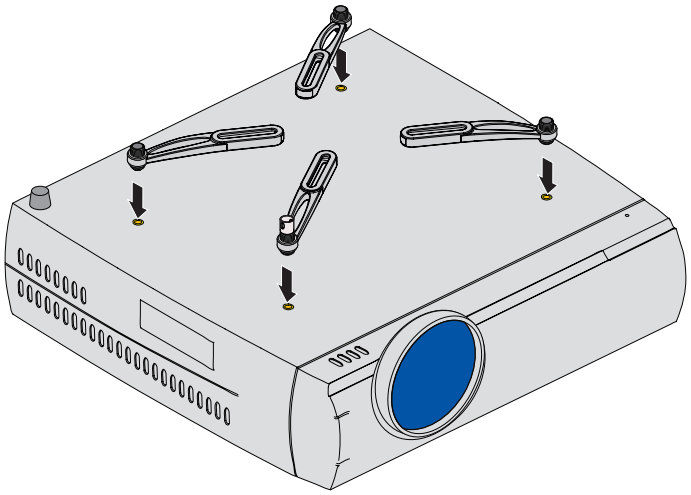
# Multiple Mounting Point Installation

## Step 1

1. Locate the projector’s mounting points.
2. Position an appropriate number of mounting legs on the projector.

The four long mounting legs come pre-installed, but you can use three (3) or four (4) long mounting legs and/or short mounting legs, depending on what the projector requires.

The number and placement of mounting points on projectors varies between projector manufacturers. Refer to you projector’s technical specifications for the number and location of the mounting points on your specific projector.



Proceed to the **“Securing the PDS-PLUS/PDS-PLUS-W Projector Mount”** section.

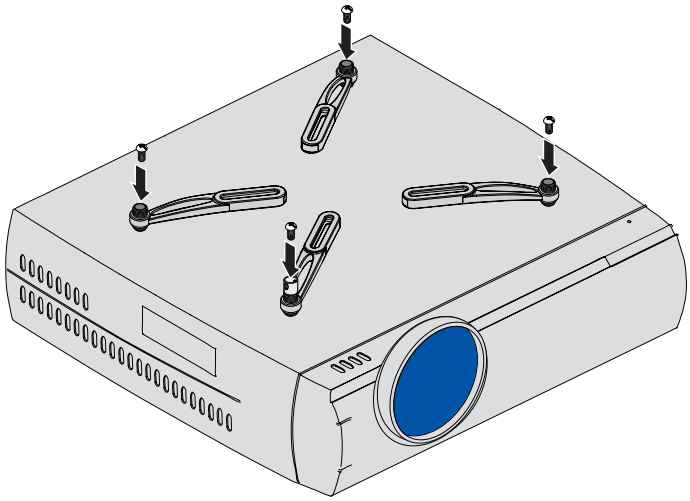
## Step 2

Only attach to the projector manufacturer's specified mounting points on the projector chasis with a minimum three mounting legs. Please follow all safety instructions specified by the projector manufacturer as well as the safety instructions outlined in this manual.

Depending on your application, the long mounting legs and the short mounting legs may be used together. There are multiple configurations that may be used combining the long mounting legs with the short mounting legs.

1. Attach the appropriate number of mounting legs to the projector using the corresponding mounting hardware.

Do not tighten the mounting hardware at this time.



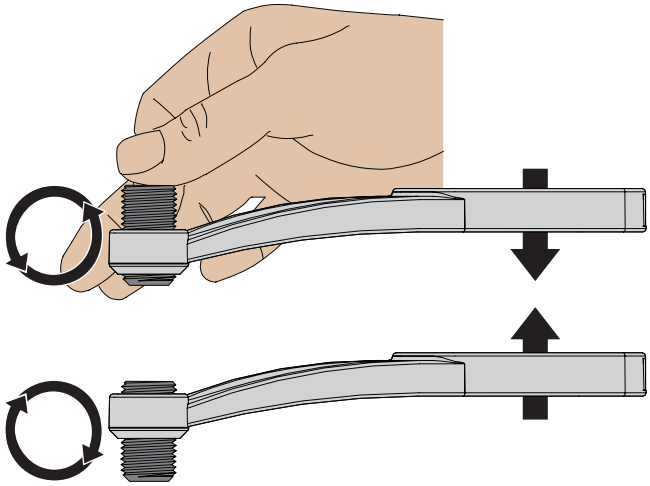
## Step 3

1. If the mounting legs need to be leveled, rotate the leveling barrels to level the mounting bracket.
2. To raise the mounting legs, rotate the leveling barrel clock-wise. To lower the mounting leg, rotate the leveling barrel counter clock-wise.

Raise or lower each of the mounting legs, by rotating the leveling barrels, until all of the mounting legs are at an equal height.

- Lower the mounting leg by rotating the leveling barrel counter-clockwise.
- Raise the mounting legs by rotating the leveling barrel clockwise.

3. When the desired position is achieved, tighten the mounting screws to the projector and then tighten the hex head leg screws with the M5 Allen wrench.

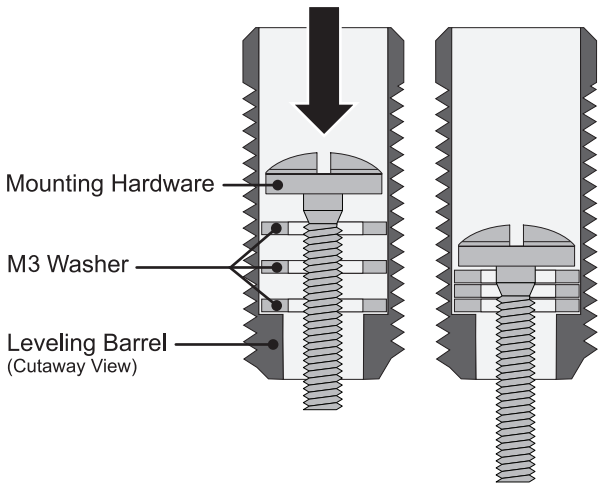


## Pro Tip

**Mounting Hardware Too Long?**
The depth of some projector mount points may prevent you from tightening the M2.5 and M3 mounting hardware.

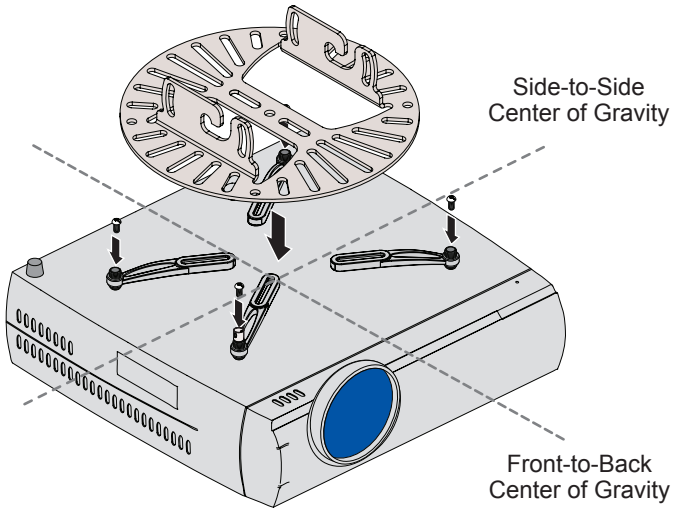
You can reduce the length of the M2.5 and M3 mounting hardware by stacking up to a maximum of five (5) M3 flat washers inside the leveling barrel.

Avoid stacking too many M3 washers; the mounting hardware must thread into the projector mount point at least four (4) complete turns.



## Step 4

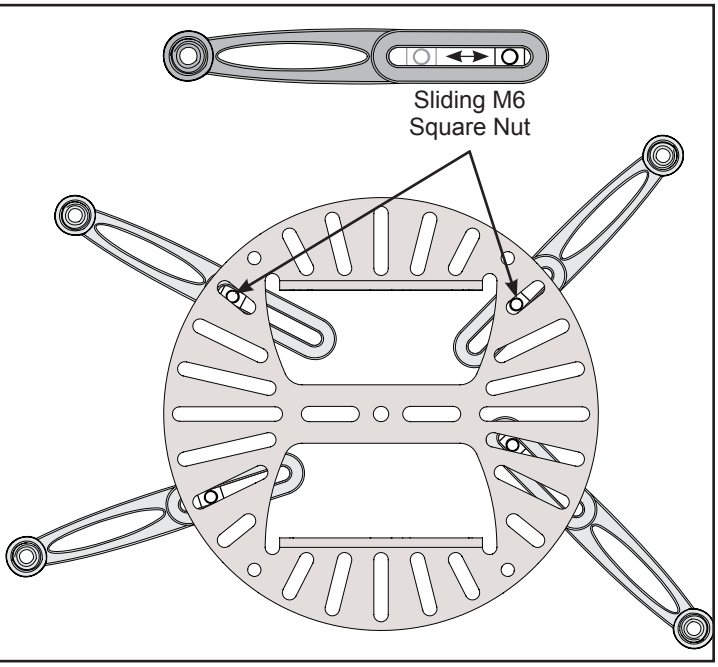
1. Identify the projector's approximate front-to-back center of gravity. Place your hands on each side of the projector and gently lift it an inch from the surface on which it is resting. Carefully adjust your grip on the projector until it seems balanced from front-to-back. Mentally note the apparent center of gravity.
2. Identify the projector's approximate side-to-side center of gravity. Place your hands on the front and back of the projector and gently lift it an inch from the surface on which it is resting. Carefully adjust your grip on the projector until it seems balanced from side-to-side. Mentally note the apparent center of gravity.
3. Place the PDS-PLUS/PDS-PLUS-W Projector Plate (if not already attached) on top of the mounting legs with the center of the plate as close as possible to the projector's center of gravity.




## Step 5

1. Position the legs accordingly for best configuration. You may raise or lower each leg independently by turning the leveling barrels.
2. Secure the legs to the projector plate by screwing M6 x 12mm security screws into the M6 square nut (do not overtighten) on the mounting legs.
3. Verify the position of the integrated sliding M6 square nut in the mounting leg relative to a nearby slot on the PDS-PLUS/PDS-PLUS-W Projector Plate.

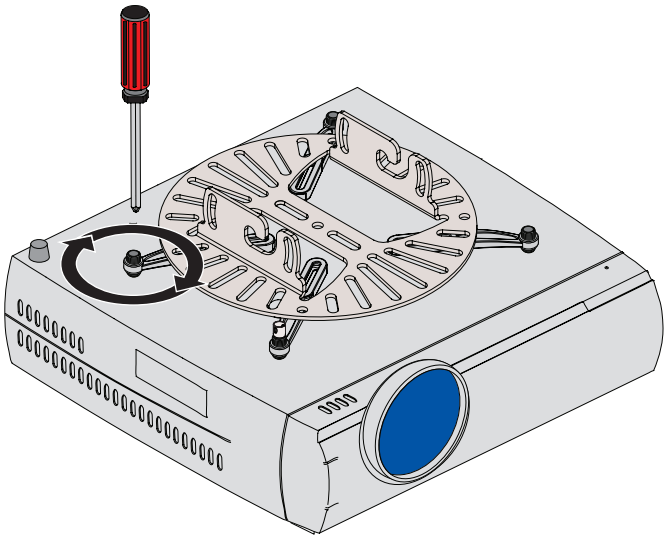
If the M6 square nut is not aligned with any slot, you can use any thin implement, such as a toothpick, to nudge it into alignment.




## Step 6

1. Tighten the mounting screws which secure the mounting legs to the projector.

Do not overtighten the mounting screws.



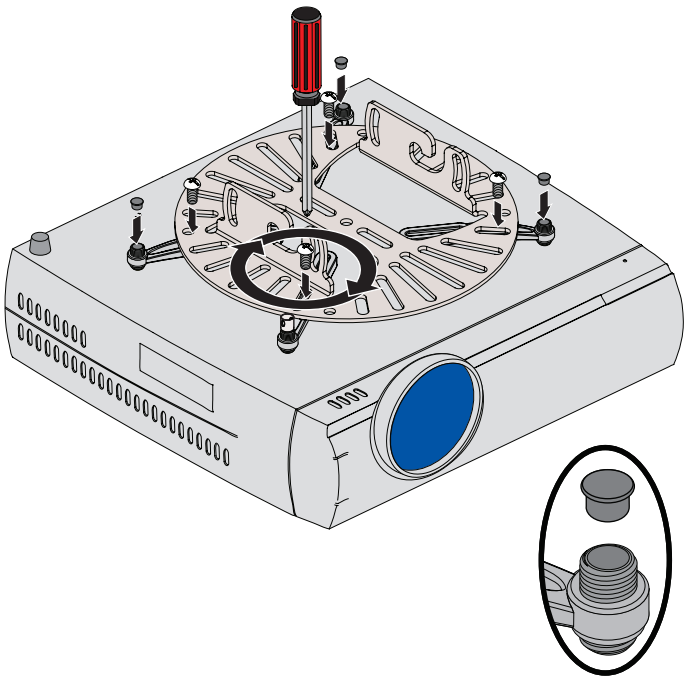
**Step 7**

❶ Attach the Projector Plate (if not already attached) to each of the mounting legs by inserting and tightening one (1) M6 x 12mm screw through the Projector Plate into the M6 square nut on each of the mounting legs.

⚠ Do not overtighten the M6 x 12mm screws.

❷ Insert one (1) Barrel Cap into the end of each leveling barrel (except the security leveling barrel).

Proceed to the **"Attaching the PDS-PLUS/PDS-PLUS-W Base"** section.



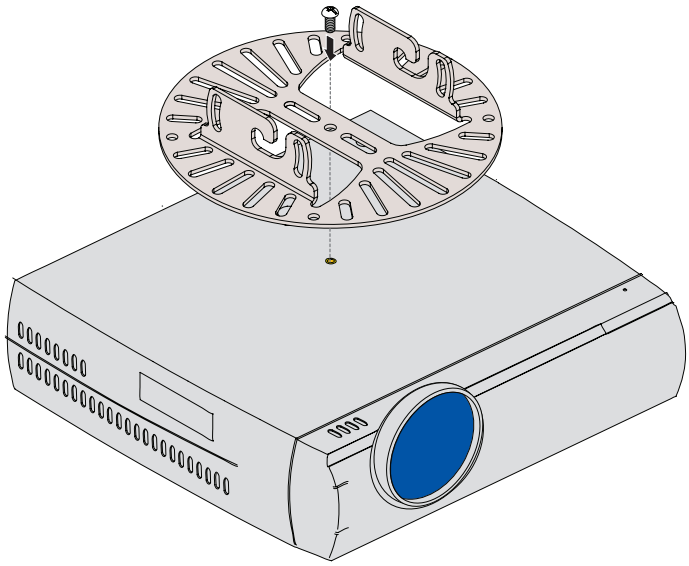
## Single Mounting Point Installation

If your projector has only one mounting point, a ¼-20 x 5/16" screw must be used to attach the mount to the projector. Please refer to the following three steps:

❶ Determine where the mounting point is located.
❷ Place the projector plate over the mounting point.
❸ Insert the ¼-20 x 5/16" security screw.

⚠ Do not overtighten the ¼-20 x 5/16" screw.

Proceed to the **"Attaching the PDS-PLUS/PDS-PLUS-W Base"** section.



## Attaching the PDS-PLUS/PDS-PLUS-W Base

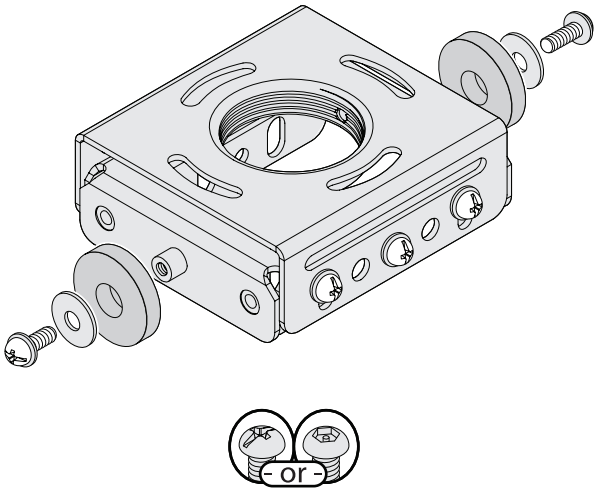
### Step 1

❶ Place one (1) nylon washer and one (1) ¼" flat washer over the hinge pin.

❷ Insert and tighten one (1) M6 x 12mm screw.

❸ Repeat ❶ and ❷ for the opposite hinge pin.

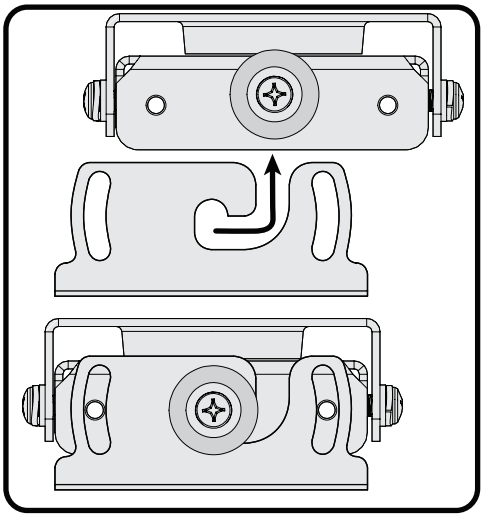
You can use either the standard hardware or Lock-It™ security hardware. Replace eight (8) M6 x 12mm screws and one (1) M6 x 8mm set screw.




### Step 2

❶ Raise the projector (with the mounting bracket attached) and hook the projector bracket over the hinge pins.

❷ Make sure the bracket is resting on the Base Box before letting go of the projector.



### Step 3

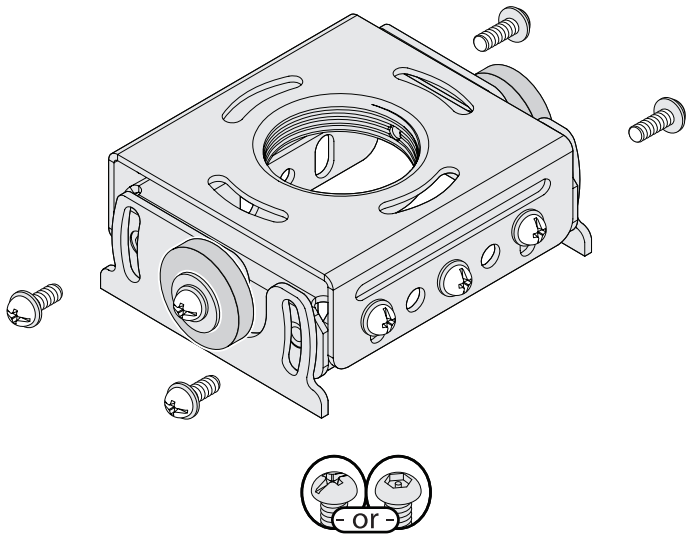
❶ Insert the four (4) M6 x 12mm tilt adjustment screws, two (2) per side.

You can use either the standard hardware or Lock-It™ security hardware.

❷ Tighten all screws.

Do not overtighten the mounting screws.

Proceed to the **"Base Box Adjustment"** section.



## Base Box Adjustment

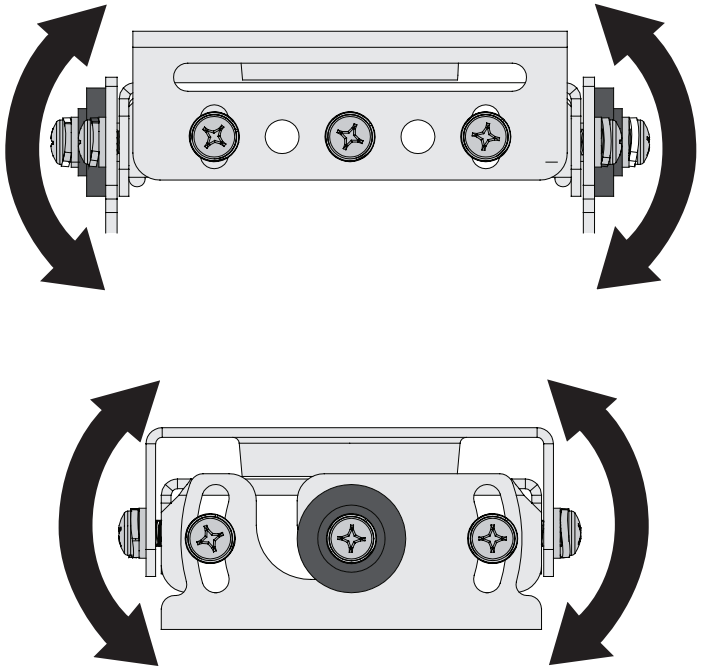
1. You can adjust the roll of the projector by loosening the three (3) front and rear M6 x 12mm screws.

   Do not fully loosen the screws, as the mount may drop.

2. Set the desired roll and then tighten the screws. First tighten the center screws and work your way to the outside screws, making any final adjustments prior to tightening the last two screws.
3. You can adjust the tilt of the projector by loosening the two (2) M6 x 12mm screws on each side of the Base Box.
4. Set the desired tilt and then tighten the screws, making any final adjustments prior to tightening the last two screws.

   If your projector is not holding the tilt, install the four (4) external tooth washers on the four (4) M6 x 12mm Phillips head screws w/ Integrated Washers.

5. Once all adjustments have been made, tighten all hardware.



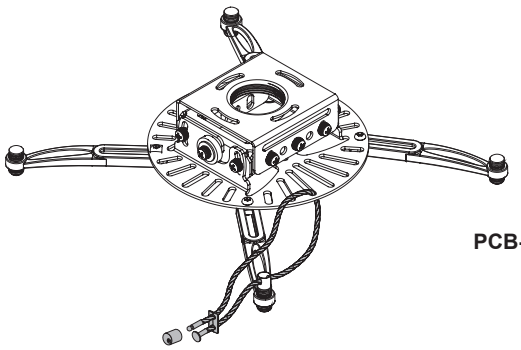
## Securing the PDS-PLUS/PDS-PLUS-W Projector Mount

Your PDS-PLUS/PDS-PLUS-W Projector Mount includes one (1) Security Leveling Barrel which can provide additional theft deterrence for your projector.

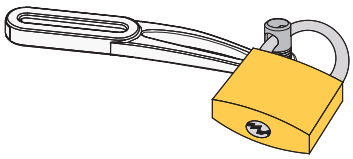
Shown below are two examples of how you can use the security leveling barrel to make your projector installation more secure: the PCB-CSL1 Security Cable (sold separately) or padlock (combination or keyed; sold separately). Follow the instructions below to install and secure the security leveling barrel.

If you choose to install the security leveling barrel, please follow the instructions outlined below.

1. Determine which leveling barrel will be removed.
2. Remove the mounting screw.
3. Remove the leveling barrel by turning the leveling barrel counter-clockwise.
4. Thread in the security leveling barrel clockwise.
5. Insert and tighten the mounting screw.
6. Attach theft deterrent device (PCB-CSL1 or padlock) through the hole that is on the security leveling barrel.



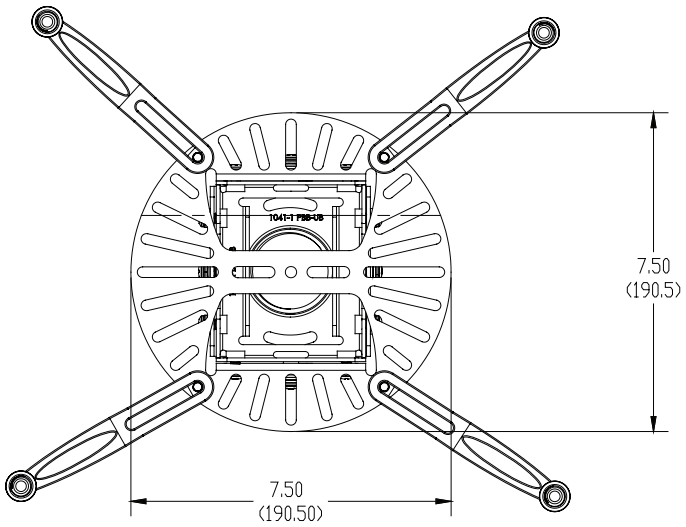
**PCB-CSL1**

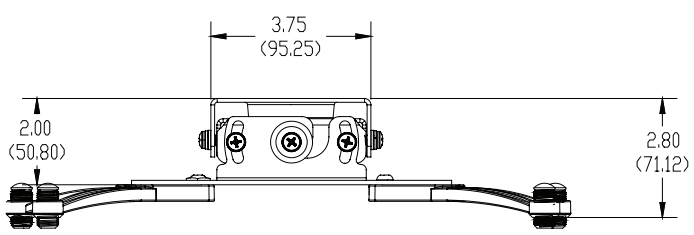


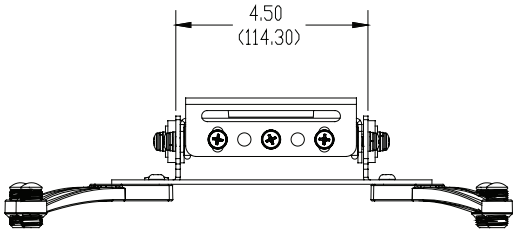
**Padlock**
(Combination or Keyed)

## Technical Specifications

All measurements are in inches [millimeters].



## Warranty

**PREMIER MOUNTS**
**LIMITED LIFETIME WARRANTY**

**What and Who is Covered by this Limited Warranty and for How Long**
Premier Mounts warrants this product to be free from defects in material and workmanship for the lifetime of the original owner of this product. The limited warranty is valid only for the original purchaser of the product.

**What Premier Mounts Will Do**
At the sole option of Premier Mounts, Premier Mounts will repair or replace any product or product part that is defective. If Premier Mounts chooses to replace a defective product or part, a replacement product or part will be shipped to you at no charge, but you must pay any labor costs.

**What is Not Covered; Limitations**
PREMIER MOUNTS DISCLAIMS ANY LIABILITY FOR DAMAGE TO MOUNTS, ADAPTERS, DISPLAYS, PROJECTORS, OTHER PROPERTY, OR PERSONAL INJURY RESULTING, IN WHOLE OR IN PART, FROM IMPROPER INSTALLATION, MODIFICATION, USE OR MISUSE OF ITS PRODUCTS.

PREMIER MOUNTS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. PREMIER MOUNTS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, INABILITY TO USE ITS PRODUCTS OR LABOR COSTS FOR REMOVING AND REPLACING DEFECTIVE PRODUCTS OR PARTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

**What Customers Must Do for Limited Warranty Service**
If you discover a problem that you think may be covered by the warranty you MUST REPORT it in writing to the address below within thirty (30) days. Proof of purchase (an original sales receipt) from the original consumer purchaser must accompany all warranty claims. Warranty claims must also include a description of the problem, the purchaser's name, address, and telephone number. General inquiries can be addressed to Premier Mounts Customer Service at 1-800-368-9700. Warranty claims will not be accepted over the phone or by fax.

Premier Mounts
Attn: Warranty Claim
3130 East Miraloma Ave.
Anaheim, CA 92806

**How State Law Applies**
THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

## Disclaimer

Premier Mounts intends to make this manual accurate and complete. However, Premier Mounts makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. Premier Mounts makes no representation of warranty, expressed or implied, regarding the information contained herein. Premier Mounts assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

©Premier Mounts 2009